

The observations of F. E. Schultze on *Quadrula symmetrica*, and those of Leidy on *Trinema acinus*, show that in these two genera the same things evidently take place as in *Euglypha*; that is to say, the platelets protecting the body are produced in the interior of the parent individual, and afterwards conveyed round the body of the daughter individual. M. Gruber has almost completely traced these same phenomena of division in *Cyphoderia ampulla*, the carapace of which is not formed of a comparatively restricted and tolerable constant number of plates, but rather of an infinity of little particles which gives this envelope the aspect of shagreen.

The phenomena of division seem to be nearly the same in the *Arcella*.

In the Monothalamia with carapaces formed of foreign materials, such as the *Diffugia*, which are covered with grains of sand &c., individuals have been observed united by their buccal poles; and this state has been regarded as the result of conjugation. According to Dr. Gruber this interpretation is incorrect, and the individuals thus joined must be the product of a division on the point of completion. With Bütschli he assumes that these Rhizopods first of all introduce into their bodies the foreign substances which are to serve for the formation of the envelope. The sand-grains, Diatoms, &c. are then transported to the outer surface of the newly-formed individual, just in the same way as the platelets of the *Euglypha*, *Quadrula*, &c.

The forms which are protected by an inflexible chitinous carapace also present the same mode of multiplication. This would seem to be proved by Dr. Gruber's observations on *Microgromia socialis*, and Schneider's on *Diffugia inchelys*.

On the other hand, in the genera which have an envelope formed by a flexible membrane adherent to the sarcode of the body, division takes place, as in the *Amœbe*, in the mode that may be denominated normal, because it is that which is by far the most frequent in animal cells. A constriction is produced in the middle of the body, and causes the formation of two individuals.—*Zeitschrift f. wiss. Zool.* xxxv. p. 431, & xxxvi. p. 104 (1881); *Bibl. Univ. Archives des Sciences*, December 15, 1881, p. 624.

The Mediterranean Species of Fierasfer. By Prof. C. EMERY.

Fierasfer acus, the commonest species in the Mediterranean, attains a length of 19 centim. (about $7\frac{1}{2}$ inches), and takes up its abode preferently in the large Holothuriæ, such as *Holothuria tubulosa* and *Stichopus regalis*. The author has frequently observed the process adopted by the little fish for introducing itself into the body of the Echinoderm. It commences by examining the whole length of the latter until it has discovered at which end the anus is situated. It places its muzzle against this orifice, and then, at the

moment when the sphincter dilates to allow the escape of the water which has served for respiration, it bends round quickly, and gliding its slender tail along its body, passes it in an instant into the cloaca of the *Holothuria*. This first step taken, the rest of the operation may occupy more or less time. A small *Fierasfer* attacking a large *Holothuria* sometimes succeeds in making an entrance at once. But should there be any disproportion of size the parasite waits for the respiratory stream to dilate the anus, and then pushes further in; and it is only by long-continued efforts that it finally enters. Prof. Emery has seen as many as seven of these fish successively enter the body of the same individual.

The *Fierasfer* lodges at first in the respiratory tree of the *Holothuria*, which opens into the intestine not far from the anus; but it is also found in the perivisceral cavity, because the respiratory tree is most frequently torn by the efforts of the little fish, especially when it receives several of them at the same time. The *Fierasfer*, however, is not a true parasite feeding at the expense of its host, but gets its nourishment from the sea by pushing its head out of the *Holothuria*. The position of its anus, which is placed very near the head, also enables it to evacuate the faecal matters and the sexual products without quitting its domicile.

This singular fish consequently makes use of the *Holothuria* as a habitation, or as a refuge from its enemies. It is therefore what we may call a *commensal* in the words of Van Beneden, or, as Prof. Emery expresses it, a lodger-parasite (*inquilinus*).—*R. Accul. dei Lincei, Atti*, ser. 3, vol. vii. 1880; *Bibl. Univ., Archives des Sciences*, December 15, 1881, p. 627.

Mode of Capture of Lizards in Southern Europe. By Dr. T. EIMER.

In my memoir on *Lacerta muralis cerulea* I described the peculiar method, usual in Italy, by which the boys there catch lizards: they make a noose at the end of a long stiff haulm of grass, and fill this with saliva so as to appear like a shining mirror. They hold the grass-haulm towards a lizard, which, being very inquisitive, comes nearer and nearer in order to examine the apparatus, and in the midst of its curiosity easily allows the noose to be drawn over its head.

The celebrated statue of the *Sauroctonus**, as is well known, represents a youth, still of tender age, who, leaning with his left arm upon the trunk of a tree, and holding in his right hand a piece of a rod, in a watchful attitude follows with his eyes a lizard running up the trunk of the tree, with the object, as the archaeologists think, either of tickling or transfixing it with the above-mentioned rod, as with a dart, a fragment of which the rod would represent. The latter opinion, so far as I know, relates to the statement of Pliny†,

* *Σαυροκτόνος*, lizard-killer.

† *Hist. Nat.* xxxiv. 70.